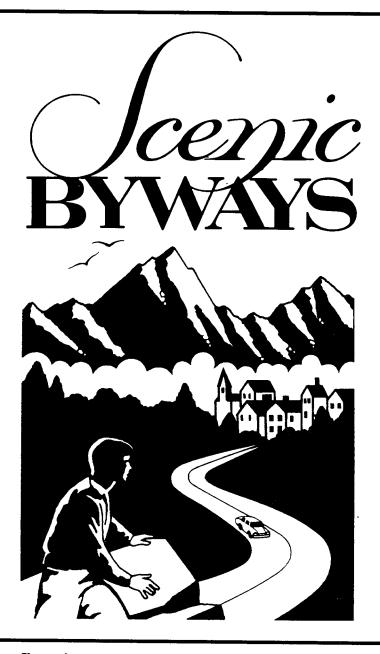


Federal Highway Administration

Final Case Study for the National Scenic Byways Study

Chronologic History of Scenic Byways in North Carolina



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Final Case Study for the

National Scenic Byways Study

CHRONOLOGIC HISTORY of SCENIC BYWAYS in NORTH CAROLINA

SEPTEMBER 1990

Prepared for The Federal Highway Administration

Submitted by North Carolina Department of Transportation

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Prepare a chronology of the major steps taken by NCDOT and other parties involved since the Scenic Byways Program was first suggested, through to the present, including the program's approval by the Board of Transportation, and whatever steps have been taken to implement the program.

Each major step should be fully annotated: what was done, who did it, what parties at issue supported or opposed it, what questions were involved, and how those questions were resolved. The intent and use of the annotated chronology is that it serve as a guide to what other states might expect in terms of the actions and the total time required to establish similar programs of their own.

Chronologic History of Scenic Byways in North Carolina

In April 1964, the President's Council of Recreation and Natural Beauty issued a policy statement recommending a national program of scenic roads. In January 1965, North Carolina Scenic Roads and Parkways Study was completed by the Planning and Research Branch in three volumes. Interested public and private agencies were contacted to make nominations to the three volume study. Sixty-nine routes were proposed statewide. In October 1965, the Highway Beautification Act was signed and North Carolina concentrated on beautification plantings and other efforts along the state's highways. By June 1966, a Proposed Program for Scenic Roads and Parkways (David R. Levin, FHWA, Ret.) was prepared for the President's Council on Recreation and Natural Beauty. In this program, North Carolina was allocated \$85 million for a minimal program and \$170.1 million for an extended program. The funds were to aid in road improvements and other related expenditures. By the end of the 1960s, North Carolina decided not to implement a scenic roads program because there were no zoning laws or other land use controls used by counties statewide which would assist the premises on which this program was based.

In February 1974, FHWA published a Manual for National Scenic Highway Study which noted the changes in national priority from environmental protection to energy and asked states again to review scenic roads programs, and to compile a list by March 1974. North Carolina responded with a list of 85 proposed routes, some of which were continued from the 1965 study. By the end of 1974, an oil embargo and recession removed the possibility of a scenic roads program in North Carolina.

In August 1982, petitions arrived at the Governor's Western Office requesting implementation of a scenic roads program in North Carolina. Professor Harley Jolley of

Mars Hill College and Harry Baker, a landscape architect with the National Park Service, initiated this revival of scenic roads in North Carolina after they had seen the results of Tennessee's new Scenic Parkways program. NCDOT Landscape Unit was requested to evaluate and respond to them by Secretary W. R. Roberson and Highway Administrator William Rose. In September 1982, the Landscape Unit proposed a scenic roads program with 15 pilot routes across the state. No action was taken at this time to develop a byways program although issues of program cost, enabling legislation, and system logo were noted as areas of importance.

From 1983 to mid 1987 there was little action on scenic roads of any sort in North Carolina. Derrick Crandall of the American Recreation Coalition requested information on North Carolina's scenic roads program from Secretary James E. Harrington. Because of the Landscape Unit's earlier involvement in scenic roads, W. D. Johnson, State Landscape Engineer, responded Mr. Crandall's request by informing him that North Carolina had evaluated scenic roads in the past but had no program at that point.

Stimulated by the FHWA publication "Scenic Byways" in which North Carolina was described as "having no program at this time though the state had made several studies in the past," Highway Administrator George E. Wells requested a Scenic Byways Program to be "developed as it should be." In mid October 1988, Chief Engineer Earl H. McEntire assigned the task of developing a scenic roads program to the Landscape Unit under the direction of William D. Johnson, State Landscape Engineer. In early November it was noted by W. D. Johnson that the development of a scenic highways program was a tremendous undertaking that would best be done as a joint venture by the Landscape Unit and the Planning and Research Branch. By mid November the significance and need to move ahead with this program was noted by Chief McEntire. He requested that an action plan and a list of those to be involved in developing the program and its criteria be put together.

Beginning in January 1989, Elizabeth E. Fischer surveyed other states with Scenic Byways Programs for definitions of scenic byways, for authorization or legislative action, and for logos and criteria. A review was made of the results of the 1965, 1974 and 1982 studies in North Carolina. By compiling the three route lists and the geographical locations of the routes within the state a more concise listing was prepared for in-depth study. With the help of Assistant State Landscape Engineer Frank H. Bowen, the branches to be involved with the Task Force were named and an action plan was proposed for the development of the scenic highways program. Named to the Task Force were the Traffic Engineering Branch to assess safety

issues, the Planning and Research Branch to review issues of environmental and land use preservation, the Right-of-Way Branch to determine the need for easements and land purchases along scenic routes, Roadway Design Branch to study existing and new roads, the Assistant State Highway Administrator to recommend other agencies outside NCDOT who would supply needed information, and FHWA to provide information at the Federal level. Eventually, this list was expanded to include the Department of Commerce's Division of Travel & Tourism, the Department of Cultural Resources' Archæology and Historic Preservation Section, and NCDOT's Bicycle Program. The initial Action Plan set forth an estimated time frame for the Scenic Byways Program from research and development to final approval and installation to occur between January 1989 and July 1989.

On 15 February, the first meeting of the Task Force was held. Issues discussed during that meeting included definitions of scenic roads as defined by North Carolina, FHWA, and other states. By realizing that no two definitions were the same the Task Force decided to create a definition that suited the needs of North Carolina in that a scenic byway is a rural route providing an alternative to the faster paced traffic and commercial areas found on major highways and consists of natural, cultural, historical and aesthetic qualities for motorists to view. Methods of developing the Scenic Byway Program were reviewed in conjunction with the elements of byways, the proposed purpose of North Carolina's program, and the designation process and operational approaches needed for the program. Information for this process was gained from in-depth studies of other state's programs and how their procedures and definitions fit the requirements North Carolina would have in its own program.

The second Task Force meeting, held in March 1989, continued discussions from the first meeting with a review of the nation's recreational demands and the place of scenic byways in the national desire for leisurely diversions. The Task Force chose to use 'Byways' as the term which best defined rural roads with special scenery and characteristics over the alternative choices of highway (suggested fast-paced traffic), parkway (suggested the Blue Ridge Parkway – a route the Task Force did not want to duplicate), boulevard (suggested an urban tree-lined street), rustic road (a mouthful to say), leisure way (did not sound right), and historic route (suggested that scenic routes had a historical aspect to them when they might not). The next major issue was who was to be the target audience and what type of trips would they prefer. Retirees, young adults with children, local, distant, or regional travelers, long or short term visitors were all discussed. Lynne Sizemore, of the Department of Commerce's Travel & Tourism Division, presented information suggesting that the Task Force look more closely to the retired population for longer trips and at those still in the work force for shorter day or

weekend trips. Additionally, questions arose on what specifically would draw travelers of either sort onto a scenic byway. Debated were loop versus linear routes, routes with destinations on either end or at both, routes that were destinations unto themselves, and what should the geographical distribution of the routes be. The results of the Task Force's discussions were that any route proposed as a scenic byway should have some drawing attraction and should be convenient to the motoring public as a loop or a linear route. Geographical distribution would determine the above while special attributes would determine the geographical distribution. It was felt that few urban areas would afford scenic routes while the rural areas of the state would provide more.

The development of guidelines and criteria was the next step that the Task Force took in the evolution of the Scenic Byways Program. After reviewing information from other states, it was decided to adopt parts of the criteria set up by Virginia and Connecticut and modify those for North Carolina's needs. Thus, the Task Force agreed to the following guidelines:

- 1. The route under consideration must have significant visible natural or cultural features along its borders. These include agricultural lands, historic sites, vistas of marshes, shorelines, forests with mature trees or other areas of significant vegetation, or notable geologic or other natural features. Singly or in combination these features set this route apart from others as being distinct. (It is the parts that make the whole special.)
- 2. The proposed Scenic Byway shall have a minimum length of one (1) mile. (Anything less would be too short to justify. Although, there are some segments of some roads that are quite special but their limited length would not justify the designation of the rest of the road.)
- 3. Existing development along the proposed Scenic Byway shall not detract from the scenic natural character and visual quality of the route's area. (As an example, strip development in a rural farming area detracts from that area as would building facades in a turn of the century community that were not original or sympathetic to the building.)
- 4. Preference will be given to those corridors with land use controls to reasonably protect the aesthetic or cultural value of the Scenic Byway. (It is hoped that residents in rural counties or communities would see the need to protect their heritage for the general welfare of the whole by passing laws to protect the visual corridors of scenic byways without placing undue hardship on themselves. Additionally, the state would not require that land use controls be enacted nor would the state place such controls on the community.)

5. A route may be de-designated if its character has changed such that it no longer meets the criteria under which it was designated. (There was a need for a clause that would allow NCDOT to remove a route from the designated listings if something occurred to change the route's essence.)

The Task Force was asked to name the best routes, in their opinion, from the list of past routes and any others that may have come to mind during discussions. Division representatives were asked to compile a list of potential routes so that there would be information from the field as well as from headquarters staff. The lists were compiled and comparisons were made to begin to put the initial scenic byways study routes together.

The third Task Force meeting was held in April. Legislation was reviewed as a possibility. The Department of Justice's Legislative Codification Section decided that none was needed because of existing legislation for preservation and natural resource issues. Funding sources needed to be identified by top level management. Criteria was finalized as were guidelines with the program's implementation schedule. Suggested routes and combined past lists were put together for an initial field trial of a visual resources inventory developed to help quantify and qualify routes proposed for the scenic byways system. Other items included discussion of a logo for road signs and promotional material as well as public relations items such as maps and informational literature for each route. Aesthetics arose during conversations on road improvements and if that Task Force desired to set up guidelines for road maintenance and improvements. At issue, specifically, was bridge replacement and the type of railings used so that motorists could or could not, depending on the design, see beyond. To better answer questions in this area John Smith, Head of Structures, was asked to join the Task Force.

By the fourth Task Force meeting, held in May, more detailed questions began to arise. In particular was the possible cutting of over 800 trees along a route on the list of possible scenic byways. The implications of the designation of this route as a scenic byway became important to traffic safety and for future road improvements. Also at issue was the status of this route as a scenic byway if the trees were cut and the resulting impact on the economy (tourism level) of the county. (This will be discussed at length in the section on safety.) Billboards along scenic byways created a great furor as this was an extremely touchy subject in NCDOT. Because of this, no specific policy was stated by the Task Force, nor was any specific detail included in any documentation. The result was that billboards may be found along a scenic byway, but they will count as negative points in the visual inventory if they detract from the route's character.

Between the third and fourth Task Force meetings a test was run on the visual inventory that had been developed by Elizabeth Fischer of NCDOT and Elizabeth Kirkland of the Department of Cultural Resources. The road test showed that more information was needed in the survey to quantify the routes rather than to qualify them. This was strongly supported by the engineers on the Task Force who felt that unequivocal numbers would better sanction a program with a strong base in aesthetics. With a review of existing methods of visual inventory, Arizona's method was adopted and adapted by North Carolina. A final listing of proposed routes was prepared during May of the top thirty routes statewide to be tested later in the summer against the visual inventory and the criteria.

During the spring there were numerous activities concerning scenic byways from information requests from other states and interested groups to reviews of S 432, the Scenic Byways Study Act, to the AASHTO survey of states. By the sixth Task Force meeting in June additional topics were added to the Task Force's discussions as more was learned by all on scenic byways. With the dedication of the United States Forest Service's Forest Heritage Scenic Byway, the Task Force was presented with the need to review the Memorandum of Understanding made between the Forest Service and FHWA on Section 4(f) of the DOT Act of 1965 and the applicability of §4(f) to North Carolina's scenic byways. J. Max Tate, FHWA, felt that the Task Force needed to hold this MOU in mind while working on other issues of relevant importance. The list of routes to be reviewed was narrowed by the Task Force and additions were suggested for gaps that might be questioned by the Board of Transportation.

A preliminary proposal was prepared for presentation to top level administration of NCDOT in late June and in late July. The purpose of these meetings was to present the Scenic Byways Program to management and to obtain approval to continue with the study prior to a vote from the Board of Transportation. After gaining administrative permission, the Task Force began a month long, statewide review of the proposed scenic routes. Elizabeth Fischer, Jennifer Pitts and Area Landscape Engineers, all of NCDOT's Landscape Unit performed this task. Fischer and Pitts surveyed the entire state and provided the common factor while the Area Landscape Engineers provided intimate knowledge of each region of the state.

At the August Task Force meeting the proposed routes were reviewed in order of the most significant routes. The Task Force decided to change the pilot program staging and to go directly into a program without a pilot. The reasoning behind this was that enough states were viewed as having successful programs and it was felt that North Carolina too would have a

successful one. A strong supporting event within NCDOT was the passage of the Highway Improvement Bill, a 13 year, \$9 billion road improvement program slated to upgrade 90 percent of the roads state wide. The passage of this program showed the Task Force that scenic byways could provide alternative travel to those motorists not preferring faster paced inter- and intrastate roads and that the two systems could work hand in hand to satisfy all needs.

Also discussed were the type and number of signs for the logo and supplemental panels that would be needed along the scenic byways and how the routes would be marked within limits of other "tour" areas (such as the Historic Albemarle Tour, a series of routes connecting historic places in the Albemarle Sound area). A major concern was on how the routes connected with major highways and with special routes such as the Blue Ridge Parkway throughout the state. By carefully signing the byways at major intersections and by making the byways signs less predominant in the landscape the Task Force felt that all needs could be met to identify the scenic byways.

By October 1989 the Task Force had begun reviewing a special computer video log for a more objective viewpoint on byways during the review process. It was felt by the majority that in order for the program to retain its integrity there had to be a way in which the subjective could be removed. Conversations between Elizabeth Fischer and Bob L. Smith, Kansas State University, led to the consideration of the RIIMS total System™ by Decision Data. The RIIMS, Route Inventory Information Management System, previously designed to be used for highway inventory and traffic safety studies was under revision to be used in scenic byway surveys. This system, developed by William L. Smith, was found to supply the direly needed objective point and it could be modified for the individual state's needs. With this system in mind the Task Force felt that it was ready to present the proposed Scenic Byways Program to the Secretary and the Board of Transportation once final revisions were made to the list of proposed scenic byways, and promotional materials ideas were coordinated.

In late November, Secretary James E. Harrington was briefed on the status of the proposed Scenic Byways Program. He was quite pleased with the program and the details that were presented but was concerned that environmental groups and others with anti-improvement goals not be able to use scenic byways as a means for their ends. Additionally, he wanted to make sure that high speed routes such as I-40 in Pigeon River Gorge were not precluded along with newly designed roads. He was told that the consensus of the Task Force was eventually to have a parallel program for scenic highways. His major concern was that the small communities be involved with the Scenic Byways Program through a series of public

meetings. After the Secretary's briefing the Finance and Programming Committee of the Board of Transportation was acquainted with the proposed Scenic Byways Program which was then given to the Drivers & Owners and Multi-Modal Committees of the Board for review prior to the final vote for approval by the Board.

At the December Scenic Byways Task Force meeting the results of Secretary's briefing and meeting with the Board were reported. At first glance the Secretary seemed at cross purposes with the Task Force particularly with the public meetings which could open up the program to too much political wrangling for routes to be included in the system. The concern on the part of the Task Force was that local opinion could bring in lots of road and bits and pieces instead of a whole planned network. The Task Force also felt that the program did not need to be involved in the tourist industry and therefore should not compromise any of the criteria or guidelines to meet the needs of others. But the Secretary's premise was to preserve the integrity of the Department and its programs so that other groups could not have negative comments on the new program.

In the first meeting of 1990 the Task Force was informed of the results of the January Board of Transportation meeting in which the Drivers & Owners and Multi-Modal Committees of the Board were given a short briefing. The Task Force finalized details on the sign policy. This stated that the scenic byways logos would trailblaze a route at approximately five mile intervals and at critical points, that the approved color logo would follow the standard MUTCD type face but not colors, and that supplemental signs would correspond in color and type to the main logo panel. Because of short state funds and unless there were to be administrative authorization nothing could be done to improve the aesthetics of bridges along scenic byways. Planning and Research made a literature search on safety and aesthetics and roadside amenities along scenic byways to round out a scenic byways bibliography. Yet, the Task Force felt there was still too much opportunity for personal opinion to interfere with long term judgment on scenic byways through public support issues, land use control in the communities, and in public information processes.

At the February Board meeting, the Drivers & Owners and Multi-Modal Committees voted unanimously to support the Scenic Byways Program and to send the program to the Finance & Programming Committee. Because of questions on the applicability of §4(f) and the cost of the program raised by Board Members Shelton and Goode the final vote by the Finance & Programming Committee was delayed until the March meeting of the Board. According to George E. Wells, Highway Administrator, the funding for scenic byways would come from the

Highway Trust Fund. Because of questions from the Finance & Programming Committee meeting the Governor was apprised of the situation and called in his support for the program to Secretary Thomas J. Harrelson the next morning.

With the Governor's support and a recommendation from the Secretary, the Board of Transportation, after approval by the Finance & Programming Committee, unanimously approved the Scenic Byways Program on 2 March 1990 at its meeting in Shelby, North Carolina. Without the support from top management there was the likelihood that there would not have been a Scenic Byways Program in North Carolina. Lack of management support was the reason in the past for a scenic byways program not being implemented. The program was taken to the citizens of the state in the following months through Transportation Improvement Program (TIP) meetings held state wide.

At the last Scenic Byways Task Force meeting held in June final details were attended to on ordering signs for roadside and a continuing concern for proliferation of official signs within highway right-of-way. Results of the TIP meetings were noted. With the exception of one county, over 70 counties of the 100 in the state with designated byways were excited to receive designated routes in their counties and communities. The issue for the one county was that the government in Raleigh would tell them how to run their business and how to use their land. The last comments made by the Task Force before it was officially disbanded were that if a county or community did not want a byway a written request to remove that route would be voted upon by the Board. The Task Force felt that there were enough others already clamoring to have a byway through their community that there was no need to force the Scenic Byways Program down anyone's throat.

With the disbanding of the Task Force the operations and management of the Scenic Byways Program were turned over to the Roadside Environmental Unit (formerly Landscape Unit). No plans are being made to create another managing committee. Details still underway are informational literature of maps and route descriptions, placing signs along the routes, clarifying details of how the program is communicated to the localities and counties across the state, and making a final survey of the initial scenic byways.

North Carolina Scenic Byways

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Prepare discussion paper on any safety questions that may have arisen during the process of establishing the program.

The discussion paper should describe the nature of the issue, why it was an issue, who the parties were, and how the issue was resolved, or if not completely resolved, how it was arbitrated sufficiently to allow the process of establishing a program to move ahead. The intent of the discussion paper is to illustrate, for the benefit of other states without scenic byways programs, what specific problems might be met and how they can overcome.

Safety Issues on Scenic Byways in North Carolina

Safety topics fell into several areas of discussion throughout the development and research phases of North Carolina's Scenic Byways Program. Basic road design involved shoulders, bridges, signs and road surface. Roadside maintenance included general, roadbed, vegetation, sign, and special seasonal maintenance. Driver familiarity with a road comprised the largest quantity of discussion and included user types and driver expectancy of road conditions. The hottest safety topic was on the location of trees and drainage canals and their relation to the road along US-264 in coastal North Carolina. By discussing these issues the Task Force was able to delineate a recommendation for routes according to their safety and to be prepared to note which routes were able to handle variable traffic types.

Roadway design safety covered many aspects of existing roads considered for designation as scenic byways. The Task Force reviewed the constituent parts of the road from the surfacing material used to the directional signs placed in the right-of-way. The pavement width and its condition were of high importance when routes were assessed. The reason being that many users of scenic byways drive large recreational vehicles or other types of vehicles with trailers and would not be familiar with the designated roads. Were two large vehicles to attempt to pass each other in the opposite direction on a narrow road there could be a problem if the road was not wide enough or if there were no pull-offs. Additionally, large recreational vehicles travelling in the mountainous regions need extra space for others to pass them as traffic labors up and down the mountain sides. In line with the road's surface condition was the capacity that the road was designed to handle. Through this aspect the Task Force looked to make sure that the road would not have to be upgraded or have special repairs made because of an increased traffic load. Pavement markings were important in their use as denoting passing zones. In the

mountains, roads were chosen for inclusion as scenic byways if there were frequent passing zones or pull-offs marked on the pavement.

Shoulder width and recovery areas were carefully discussed as there are numerous miles of scenic byways that correspond with the state's numbered bike routes. Since bikes and motor vehicles share the road, shoulders are important to ease the confluence of the two. An extra foot or two outside the main travel way would provide a safer haven for bikes. Course pavement edges are a hazard for all traffic, particularly for those drivers not familiar with the road, and were found an important aspect of reviewing routes. Recovery zones off the shoulder are another area that concerned the Task Force. Questions arose on the relation of trees, rock forms, and water to the edge of pavement and the safety levels of the road with these features along side. Traffic Engineering representatives and others involved in roadside safety felt that scenic byways promoted these attractive hazards. Although, if drivers were made aware of situations in which these features could be hazardous through warning signs and information in the scenic byways literature, tort situations could be avoided.

Traffic Engineering presented a concern to the Task Force on the type and size of sign to be used for byways when signing the routes was discussed. They were concerned that scenic byways signs could become a visual nuisance in themselves if they were not placed, sized, and designed to work with the landscape. Therefore, they developed the policy stated in the chronology. Another concern was the proliferation of official signs placed on the right-of-way. These include Adopt-a-Highway, Informational, USFS Scenic Byway, Scenic Byways, and Historical Marker signs in addition to directional, warning, and safety signs. The influx of signs has the possibility of creating a driving hazard by directing the driver's attention from the road to the signs along side. Thus, the traffic engineers wanted to make sure that the scenic byways signs would be placed at a frequent but distant interval, that the sign would not overwhelm the road (be small), and that they could be read with rapid ease.

Speed limits were another safety issue along byways. The Task Force felt that the purpose of a scenic byway was for motorists to view and enjoy the route and its attributes. Thus, the route should have compatible speed limits for the sights it offered and the condition of the road. It was recommended that existing speed limits be changed to slow traffic down, but because of the needs of local traffic it was decided to leave speed limits alone. Roads should be suited to the vehicle that typically uses the road and therefore

should be chosen as a byway for its compatibility with the average user and vehicle in mind. Included in discussions were how speed limits affected the visitors perception of the road and its level of safety. If the driver were unfamiliar with the road and its special characteristics were close to the edge then, in all likelihood, the driver's rate of speed would decrease because of perceived constrictions. On the other hand, if the road was upgraded to meet new standards by widening the pavement and increasing the clear zone size, the driver's speed would probably increase because of his cognition of a more open space.

Because of bike safety issues, vehicle compatibility and newly completed bridges were opening around the state bridge design and safety emerged as a topic of discussion. It became so important that the State Structures Engineer, John Smith, was called in to join the Task Force. Concern had developed in several Task Force members on the rising prevalence of the New Jersey type barrier bridges used to replace older bridges along rural roads. It was felt that these 'urban' forms did not fit in the rural environment and that most wanted to see what was on the other side of the bridge railing as they drove along. This was particularly important on bridges over water, creeks, lakes or rivers. The structural and traffic engineers felt that these new barriers were safer because of the structural form and that drivers had to keep their eyes on the road because they cannot see through these concrete barriers. Yet, the dialog showed that more of the Task Force was interested on seeing what was on the other side of that barrier than in being safe. Thus, the issue of safety and aesthetics emerged.

Many roads were reviewed across the state. Many failed to meet the criteria of compatible development along the road because of road improvements. Steep, sharp cut and fills were made instead of working with the terrain. Rip rap covered slopes instead of vegetation. New Jersey barrier bridges had replaced peek-a-boo railings. These roads had been made sterile by their improvements and no longer had a special a unique character, but these roads are considered safe. The Task Force's primary concern was that the routes chosen to be scenic byways did have the significant characteristics that made them special, but they also had to be safe for the average tourist. Special bridge designs and guard rail finishes would be nice to use along routes designated as scenic byways but the cost of special improvements above the standards would not be made unless there were additional funds set aside and there was top level management approval for such. At this time there is neither funding nor support for special amenities nor is any foreseen in the near future. Therefore, the scenic byways in North Carolina are safe and unusual. The routes on

which safety questions appear will have special warnings for oversize and over weight vehicles and any safety hazards that may be found.

Maintenance was a safety issue for the Task Force from general roadside care, to patching potholes, to controlling sediment and erosion, and to caring for vegetation, both herbaceous and woody. Most of the roads chosen for designation as scenic byways are currently low volume and low maintenance roads, but an influx of tourists could change the character of these roads unless specific guidelines were set up. Because the Task Force did not feel that maintenance was an urgent issue it was not discussed in great detail. Although, the Task Force recognized that a certain level of maintenance must occur to retain the safety level of the roads. It was accepted that as travel levels rise some roads may have to be upgraded. But, it was hoped that this will not occur in the near future because current road improvement standards are for high volume roads, not rural roads with the character of designated scenic byways. Scenic byways are ordinary roads in extraordinary situations and do not need special engineering design considerations. They need common sense in engineering to preserve their character while providing for safety.

Driver familiarity with a road and its conditions is the final aspect of safety along scenic byways reviewed by the Scenic Byways Task Force. When discussing the target audience, the Task Force realized that there would be many drivers travelling unfamiliar roads. The Task Force understood that a driver familiar with a road would expect any unusual events that were not signed or otherwise warned and that a driver not experienced in this road would find it hazardous. Thus, was revealed a need to make the driver aware of road conditions. The solution for North Carolina was to have detailed route narratives which described not only the scenery and interesting details of the routes but to include special comments on the road where necessary. The long term solution would be to correct any problem areas on these routes through signing and road improvements. In order to project which areas might be in need of more detailed route narrative a driver commentary system could be used while the roads were under review and inventory. This involves the driver of the survey vehicle commenting on the expected conditions of the road from the signals given by road form and signage used. This system, first described by Bob L. Smith of Kansas State University, seemed to satisfy a need to discover where the problem areas on a road might be and to have explicit details recorded for later use in route narratives.

US-264 in Hyde County, a rural coastal county, became the model for all safety issues under discussion by the Task Force. The issue at hand was the location of trees within the right-of-way and their relation to the edge of pavement. The aesthetic viewpoint shows nearly eleven miles of seemingly regularly spaced trees creating a tunnel through which one views flat coastal farm lands. Immediately behind the trees on both sides of the road are drainage canals, five to six feet deep and filled with water, and then the fields. As the only place in the state with a road travelling on a tunnel-like island of trees, this site is important to the residents of the county and to those who would visit it as a scenic byway.

The traffic safety point of view shows this stretch of road as a hazard to motorists, crowded with trees too close to the road that have killed four people in the last 18 months. This is a two-lane road with low traffic volume (1000 ADT), is relatively flat and straight, and has a 55 mph speed limit. Trees located from four to twelve feet off the edge of pavement do two things: they create a shaded buffer from the canal and they create a traffic hazard near the pavement. Two separate wrecks in which teenagers from a local community were killed caused the initial uproar and a lawsuit filed against NCDOT for negligence. This resulted in NCDOT's plan to remove the over 800 trees along this stretch of road. Yet, the citizens of the county have no desire to remove the trees because they appreciated the specialness of this corridor.

Officially, NCDOT views these trees as a liability issue that could cause more accidents in the long run. Whereas, the citizens view the trees as shade providers and a softening agent for the harshness of this flat highway. For the Scenic Byways Task Force this section of road provided a good example of what to expect on roads with strategically placed, or misplaced, natural and manmade features. There will be questions on safety, liability, current and projected road use, and long range costs to improve the road safety. In this particular case, the costs compared were those to cut trees and to place guard rail between the road and the canal 14 feet away; the cost to retain most of the trees and then place guard rail between the trees and the road; and the cost of life and automobile damages accrued in the past. This was and continues to be an emotional issue on all sides; the state does not want a law suit; the county does not want to lose its trees; and the Scenic Byways Task Force considered these trees of great importance to the character of the road. No final decisions have been made, nor will they for a few more months. It is more likely that safety will take precedence over aesthetics and scenery. So, safety and aesthetics must somehow find a way to work hand in hand on scenic byways.

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North Carolina Scenic Byways

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Prepare discussion paper on the environmental and land use preservation issues that may have arisen.

The discussion paper should describe the nature of the issue, why it was an issue, who the parties were, and how the issue was resolved, or if not completely resolved, how it was arbitrated sufficiently to allow the process of establishing a program to move ahead. The intent of the discussion paper is to illustrate, for the benefit of other states without scenic byways programs, what specific problems might be met and how they can overcome.

Environmental & Land Use Issues of North Carolina's Scenic Byways

Time and time again the North Carolina Scenic Byways Task Force wrangled over who was to direct and determine land use controls along scenic byways. Was it to be the counties and communities through which byways passed or was it to be the State through the Department of Transportation who would direct local use of land? It was decided that not only did the department not want to add more administrative detail but that the local level would have a better feel for what was needed in the individual counties and communities across the state. Three statutes kept coming into play throughout the development of the Scenic Byways Program. These were § 106 of the Historic Preservation Act of 1966, § 4(f) of the DOT Act of 1966, and North Carolina General Statute 121.12 (a). These laws regulate and define what may happen in the visual and physical surroundings of historic or recreational sites. Furthermore, the USFS had suggested that NCDOT consider a Memorandum of Understanding for § 4(f) to the effect that NCDOT would follow within the boundaries and definitions of the section and not impact Forest Service lands with any improvements to roads designated scenic byways.

The demise of the Scenic Byways Program nearly came about before it even began. Section 4(f) had been a bone of contention for numerous NCDOT projects, some of which had been delayed, and thus caused great angst among Board of Transportation members. Although the information was already at hand, they requested written assurance that the designation of a route as a Scenic Byway, or Scenic Highway, would not create a Section 4(f) situation. To obtain this assurance, specific discussions were held with the FHWA Division Office and the North Carolina Department of Cultural Resources. Both agencies advised that any future improvement (reconstruction, rehabilitation, or relocation) of a designated North Carolina Scenic Byway would not come under the purview of § 4(f) of the Federal Regulations. Furthermore, the designation of a road as a Scenic Byway or Scenic

Highway would not create a park or recreation area which would create a § 4(f) situation for future improvements or maintenance of the road. These positions were based on national FHWA policy dated September 24, 1987 and reaffirmed by letter to Mr. George Wells, State Highway Administrator, from Mr. Nicholas Graf, FHWA Division Administrator. Comments were also received from the North Carolina Department of Cultural Resources who agreed that not only is Section 4(f) not applicable, but neither is Section 106 of the Historic Preservation Act nor North Carolina General Statute 121.12(a).

With this out of the way the program was approved by the Board. The next land use issue arose during the Transportation Improvement Program meetings when a county decided that scenic byways would be detrimental to their ability to decide land use for economic development. Alleghany County, in the far northwest mountainous corner of the state and the fifth smallest county, was afraid, despite assurances otherwise, that scenic byways would prevent the county from zoning and using land as the citizens chose and would prevent roads from being improved. Because of their opinion of scenic byways' effect on the county they requested that all roads currently designated be de-designated and that no other routes in the county be considered. It is the opinion of NCDOT that if a county or community does not want scenic byways they do not have to have them.

The implication of Alleghany County's petition is that the county viewed scenic byways as the state's covert means to govern land use statewide. The consensus of the Scenic Byways Task Force all through the development process was that it is not the place of state government to tell local government how or where to regulate land uses nor will it be. If conservation is important to the people they will do something about it and scenic byways will be successful only in the level of community support that is available. There are already enough requests for additional routes from others that this one request will not effect the success of the program.

It was recognized by the Task Force that land use controls were very important to the life of scenic byways. It was also recognized that the state, at this point in time, could not regulate the actions of its constituent counties towards their zoning policies. Unlike Alleghany County there is evidence already that many local governments are interested in taking charge of land use controls to protect byways. Specifically, the town of Hillsborough, founded in 1766 in Orange County in the central piedmont, is interested in extending their historic district to include a portion of the town that is traversed by a byway. As the state's former summer capitol, the small town provides a living view of 18th and

19th century North Carolina. The scenic route that passes through the town allows visitors to see the town, its architecture and people, because of the great care that has been taken to preserve Hillsborough. This care is now being extended to protect a scenic byway.

Environmental conservation was another important issue to the Task Force. It was recognized that there was a need for the public to experience native flora and fauna in their natural states. Again, because the Task Force felt that this task would best be left in the hands of the communities no formal policies were made. Many scenic byways pass through wildlife refuges, national forests, and state parks which, through § 4(f), are already protected to some extent. From the Pisgah National Forest in the west to the Lake Mattamuskeet and Pea Island Wildlife refuges in the east the plants and animals of North Carolina are protected and yet are available for enjoyment by passing motorists.

North Carolina's Scenic Byways Task Force attempted to utilize state parks and local historic districts, national parks and wildlife refuges in the initial planning and development of the Scenic Byways Program. In one case this has failed because there was too much scenery and not enough money. In another case this succeeded because a community has the desire to retain its character and saw scenic byways as a means to help their ends. With the newness of this program it will take more time to truly see the results of placing the responsibility of land use controls in the hands of the community.

North Carolina Scenic Byways

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Prepare discussion paper on the economic impacts expected upon the implementation of the program.

The discussion paper should describe the nature of the issue, why it was an issue, who the parties were, and how the issue was resolved, or if not completely resolved, how it was arbitrated sufficiently to allow the process of establishing a program to move ahead. The intent of the discussion paper is to illustrate, for the benefit of other states without scenic byways programs, what specific problems might be met and how they can overcome.

Economic Issues on North Carolina's Scenic Byways

The most difficult topic of those discussed by NCDOT in the conception of the Scenic Byways Program was the aspect of economic development and scenic byways. With the help of Task Force Member Lynne Sizemore, Department of Commerce's Division of Travel & Tourism, the Task Force was made aware of current issues in the travel industry. From dialogs held on this topic it was decided that NCDOT would not attempt to get into the tourist business with the Scenic Byways Program. Rather, it would be more important to let the program speak for itself through the visitor's discovery of byway's offerings in the local communities. There were two main reasons for byways to be promoted as an economic benefit to local governments. The first was income from tourist dollars and the second was development of a service industry to provide for the tourists.

Scenic byways were thought of as introduction to the state's rural areas to those who might have otherwise missed them. Scenic byways have the potential to draw tourist dollars into these forgotten areas of the state by attracting recreational travelers. With the growing popularity of recreational travel many felt that the allure of tourist dollars could be heightened by scenic byways. This was thought to be especially true in depressed regions and communities bypassed by major highways because of their little known scenic or historic attractions that are little known to most. Therefore, when the initial development and field review of possible byways was being made there was a concerted effort to identify routes in the more rural areas of the state. An attempt was made to locate possible scenic routes in the more urban sections of the state but past development practices precluded most of the urban areas from having byways that could meet the guidelines and criteria of the program. With over 60 percent of the state's counties are in dire economic stress scenic byways were designated in over 70 percent of those counties. Thirty percent of the state's counties are economically stable and 50 percent of these have designated byways.

The Task Force felt that a community would have some consensus for what should be protected and how that could be interpreted into an economic benefit, or tourist attraction. Yet, the Alleghany County commissioners felt scenic byways was the state's means to prohibit development and not provide road improvements for future economic growth. In the meantime several chambers of commerce across the state reported that they were having more requests for day trips into their areas along scenic routes. From Bertie County in the east to Cherokee County in the west local chambers of commerce see dollar signs associated with scenic byways. Most memorable was a comment by the Cherokee County director. Cherokee County, located in the far western tip of the state, has received almost daily requests from people tired of the concrete jungles in which they live, who want to come see the scenery for a day or weekend. The majority of these requests came from residents in the Atlanta area, four hours away. Cherokee County is one of the most beautiful counties in the state and one of the most impoverished. Unlike Alleghany County to the north, who requested not to have byways in their county, Cherokee County has existing major roads traversing the county and a desire to increase tourism and income through any means possible. They see scenic byways as an added attraction.

Rural economic development was seen occurring in other states surveyed through service industry related to scenic byways. The Task Force thought scenic byways would provide North Carolina a means to help people help themselves. Economic benefits of rural tourism were seen as a means to invigorate economic problem areas of the state. Many state parks are found in the most rural counties and act as an enticement for recreational tourists. Historic sites and cultural activities were seen to be another magnet. All of these realizations came from the Task Force's initial discussions on target audiences and route characteristics. With the above attractions in addition to scenic byways, according to Vincent Dee of New York's Seaway Trail, there also needs to be accommodations, advertising, other activities, and accessibility. These are the service related items that communities along scenic byways could provide to visitors while the byways themselves provide the visitors. None of this has been proven in fact as yet, but the number of responses and inquiries received thus far supports the experience had by other states and that North Carolina would like to share.

This looks to continue as a viable possibility in the future with increasing global tourism. As foreigners increase travel abroad, they have begun looking for the real America — the rural America according to the state's Department of Commerce. Local initiative, pride and responsibility for community seemed to the Task Force to be the main focus for letting the counties and communities decide for themselves how best to attract visitors travelling on

scenic byways. As noted earlier, NCDOT did not feel that it needed to be another travel agent for the state but it also saw a problem that could arise none to pleasantly.

The task Force realized that tourism can contribute to both the economy and cultural communication between peoples and that this very benefit could also create problems. This could occur by attracting so many people and their vehicles that without great care on the part of the state and the communities the areas now considered scenic could become otherwise. Rural dialects could be lost as visitors from all over interact more. The land could be filled with tourist accommodations and additional attractions and that beautiful scenery could be lost. Perhaps, if planners in communities statewide could review the efforts that the Center for Rural Massachusetts developed to preserve the state's character these scenarios would not happen. The Center's design was to provide rural communities with a means to retain their character while creatively providing for economic development, retaining both farmland and open space while providing for industrial and residential development. Yet, tourism retains and image of the good, the bad and the ugly until actions such as those made in Massachusetts are made.

Recreation is not just for fun, but a necessity not only in North Carolina but across the nation. The Scenic Byways Task Force saw the need to develop scenic byways and that the potential for enhancing tourism and recreation went with this program. Tourism is the second largest industry in North Carolina and scenic byways will provide additional value to private businesses, state and local revenues and the individuals enjoyment of recreational driving. With these points in mind the Scenic Byways Task Force felt that North Carolina was in good stead to provide a program to the state at low cost and high reward culturally, naturally, and economically.

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Prepare an evaluation of where the NC Scenic Byways and Highways Program is headed, what activities are planned for near term and long term, and what results are anticipated: what are the expected increases in tourist visits and expenditures, what are the expected increases in highway traffic and costs, if any, of highway enhancements to accommodate growth in tourist traffic, and what will be the public acceptance of the new program? What might other states expect to achieve by implementing similar programs?

Near & Long Term Issues on North Carolina's Scenic Byways

There are a number of issues that North Carolina Scenic Byways Program will need to attend in the next several years. The first and foremost is to educate the state's citizens in what scenic byways are. The second is to place signs along the routes to identify them to motorists. The third is to prepare maps and route narratives for public use at no charge. The fourth is to document each route by recording and inventorying the attributes found along the way.

In educating people on the meanings of scenic byways several steps need to be taken. The first would be to provide a functional definition that could be used and understood to describe the same scenic byway program to all. The second would be to educate and involve other state agencies into the meaning of scenic byways and its relation to them. The third would be to educate local governments in what scenic byways mean to their environment, history, and economy.

So what does "scenic byway" really mean? Is it a scenic corridor, with natural, cultural, historical and scenic features? Is it a recreational resource or a leisure tour route, a living museum of recreational outlets? Is it a place of special interest in itself or a means to connect such places? NCDOT has taken the stand that a scenic byway provides at least some aspect of all of these. A scenic byway does not provide a means to preserve or protect the lands in its view. It does not prohibit changes to the road. A scenic byway is a way to recognize the people of North Carolina, their heritage, their culture, their history, and the land which drew them here in the first place. Scenic byways are a celebration of the real North Carolina. So what does a scenic byway do for the residents of North Carolina and those who visit? A scenic byway provides a place for residents of urban areas to visit and re-meet nature. It is a leisure and recreational outlet for motorists refresh and revitalize themselves while viewing the special places of this state. Thus, scenic byways are existing

roads from which the travelling public may view the unique characteristics of the state while experiencing a leisurely trip.

Signs have been designed using the program's logo. A policy, as detailed previously, will be implemented when the signs are placed on each route. These signs will be 24" wide by 16" tall to reduce their impact on the landscape and reduce interference with existing directional and warning signs. Each division will place the signs in ground according to the availability of space within the right-of-way.

Maps and route narratives will be developed by the Public Affairs Office in the Department of Transportation. Proposals have included a single map that would display the state scenic byways system and have short descriptions of each route and an atlas type format where each route is displayed with more detailed descriptions. Additionally, scenic byways will be identified on the primary state highway map. Informational packages will also be developed by Public Affairs for distribution statewide. All printed media will carry the scenic byways logo in order to cultivate the program's identity.

In order to document the recently designated scenic byways system, NCDOT is reviewing Decision Data's RIIMS TotalTM system. As described earlier, this system will require a team to drive each route and record on film and computer specific information relating to scenic byways. Use of this system will allow NCDOT to review routes in the future to see if they still meet the criteria under which they were designated. This system will create a detailed historical record for posterity.

In light of responses after the recent Transportation Improvement Program meetings, NCDOT expects to have strong public support. In fact, it is expected that there will be an overwhelming response when the signs are placed later this year. At this point NCDOT cannot project any increases in additional costs or road improvements. Nor can NCDOT project increases in tourist visits and expenditures. What is expected is that an ongoing review and evaluation will take place to answer all of these questions in detail in several years. If road use does increase, it is assumed that there will have to be some type of road improvements made, but those issues will be dealt with as they arise.

Other states might expect to achieve a simple program which makes the public aware of the special character of their rural areas. As the North Carolina Department of Commerce is presently promoting, "the beauty begins with the scenery." With a scenic byways program other states will have the ability to present themselves to the public at a low cost. NCDOT's projected annual budget for the Scenic Byways Program is approximately \$100,000 per year for the next six years. The major portion of this is for promotional literature, half time staffing, and travel expenditures.

A scenic byways program is a program that can evolve as the state's needs change. It is not planned to be a static program in North Carolina, nor should other states plan on a one time effort. North Carolina's Scenic Byways Program is a long term effort that is reviewing an adjunct program to celebrate the beauty of our major highways, Scenic Highways. The Board of Transportation has approved this idea which will be developed in the next year or so to identify interstates and intrastates with special scenic character.

The above projects will keep NCDOT busy with scenic byways for some time. Maps and signs should be available in early fall. The documentary of the routes, once the RIIMS system is purchased, will take a while to implement and complete. And, ongoing will be a review of the program and its impacts. NCDOT is excited to have this new program for citizens of and visitors to North Carolina to enjoy and appreciate this state's special scenery.

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